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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/673,908	01/19/2001	Paul Eliot Green Jr.	2495.14 PCT	1582

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EXAMINER

KIM, ELLEN E

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,908

Applicant(s)

GREEN JR., PAUL ELIOT

Examiner

Ellen Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 9, 12, 13, and 38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Cogan et al [Applicant's submitted prior art, USPAT 4,938,571].

Cogan et al discloses an electrochromic light modulator and teach at column 6, lines 67-end that the device can be used as an attenuator, and teach at column 4, line 55 that the element 18 is made of electrochromic material.

With respect to all the method claims, the claimed method steps are inherently shown by the Cogan et al reference.

In re claims 4, 12, 13, electrodes 12 and 12' are shown in the drawing.

In re claim 9, Cogan et al teach at column 2, lines 30-36 that there are two stages of color in the device, and teach at column 2, lines 47-54 that the voltage is applied to the device.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 10, 11, 19, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatenorth [Applicant's submitted prior art, EP 0 766 358] in view of Cogan et al.

Hatenorth discloses an optical device comprising WDMUX, WMUX, and damping device [DG, see abstract].

Hatenorth discloses every aspect of claimed invention except for the body of electrochromic material.

Cogan et al disclose an electrochromic light modulator as discussed above.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Hatenorth's device to include the electrochromic light modulator as a damping device for the purpose of having a controllable, reproducible, and dynamic range of the damping device [see Cogan et al, column 2, lines 19-29]. It is clear this would improve the Hatenorth's device.

All the claimed method steps are inherently shown by the combined device of the Cogan et al and Hatenorth.

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Claims 5, 14, 15, 16, 22-25, and 28-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cogan et al in view of Swan et al [Applicant's submitted prior art, USPAT 5,657,151].

Cogan et al discloses every aspect of claimed invention except for the first and second graded index lenses.

Swan et al teach at column 5, lines 53-65 that the graded index lens 304 and 305 are used for the purpose of focusing the divergent rays to produce collimated optical beam.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Cogan et al's device to include the graded index lenses as shown in Swan et al for the purpose of focusing the divergent rays to produce collimated optical beam so that the coupling light efficiency can be increased in the device.

All the claimed method steps are inherently shown by the combined device of the Cogan et al and Swan et al.

Claims 6, 8, 17, 18, 26, 27, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsushima et al [Applicant's submitted prior art, USPAT 5,600,466] in view of Cogan et al.

Tsushima et al disclose an optical signaling network apparatus comprising demultiplexer, multiplexer, and modulator [see front drawing].

Tsushima et al discloses every aspect of claimed invention except for the body of electrochromic material.

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Cogan et al disclose an electrochromic light modulator as discussed above.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Tsushima et al device to include the electrochromic light modulator as a damping device for the purpose of having a controllable, reproducible, and dynamic range of the damping device [see Cogan et al, column 2, lines 19-29].

All the claimed method steps are inherently shown by the combined device.

In re claim 7, Cogan et al teach at column 2, lines 30-36 that there are two stages of color in the device.

In re claims 8, 18, 27, Tsushima et al disclose at column 1, lines 18-25 that the optical system is suitable between local area network communication systems.

In re claim 37, Tsushima et al teach at column 6, lines 53-end that the digital signal is transmitted in the device.

Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatenorth [Applicant's submitted prior art, EP 0 766 358] in view of Cogan et al, and further in view of Swan et al.

Hatenorth discloses an optical device comprising WDMUX, WMUX, and damping device [DG, see abstract].

Hatenorth discloses every aspect of claimed invention except for the body of electrochromic material, and the graded index lens.

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Cogan et al disclose an electrochromic light modulator as discussed above.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Hatenorth's device to include the electrochromic light modulator as a damping device for the purpose of having a controllable, reproducible, and dynamic range of the damping device [see Cogan et al, column 2, lines 19-29]. It is clear this would improve the Hatenorth's device.

Swan et al teach at column 5, lines 53-65 that the graded index lens 304 and 305 are used for the purpose of focusing the divergent rays to produce collimated optical beam.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify the device to include the graded index lenses as shown in Swan et al for the purpose of focusing the divergent rays to produce collimated optical beam so that the coupling light efficiency can be increased in the device.

Claims 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsushima et al [Applicant's submitted prior art, USPAT 5,600,466] in view of Cogan et al, and further in view of Swan et al.

Tsushima et al disclose an optical signaling network apparatus comprising demultiplexer, multiplexer, and modulator [see front drawing].

Tsushima et al discloses every aspect of claimed invention except for the body of electrochromic material, and the graded index lens.

Cogan et al disclose an electrochromic light modulator as discussed above.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Tsushima et al device to include the electrochromic light modulator as a damping device for the purpose of having a controllable, reproducible, and dynamic range of the damping device [see Cogan et al, column 2, lines 19-29].

Swan et al teach at column 5, lines 53-65 that the graded index lens 304 and 305 are used for the purpose of focusing the divergent rays to produce collimated optical beam.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify the device to include the graded index lenses as shown in Swan et al for the purpose of focusing the divergent rays to produce collimated optical beam so that the coupling light efficiency can be increased in the device.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

For all official patent application related correspondence for organizations reporting to the Commissioner of Patents:

- Correspondence that is hand-carried (or delivered by other delivery services, e.g., FedEx, UPS, etc.) must be delivered to the Customer Window :

220 20th Street S.

Crystal Plaza Two, Lobby, Room 1B03

Arlington, VA 22202

- Correspondence that is transmitted by facsimile must be directed to the central facsimile number, (703) 872-9306.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (571) 272-2349. The examiner can normally be reached on Monday through Thursday.

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Ellen E. Kim

Primary Examiner

December 1, 2004/EK

A handwritten signature in black ink, appearing to be 'EEK', written in a cursive style.